## SECTION 7 – POST-INJECTION SITE CARE AND SITE CLOSURE PLAN

This Post-Injection Site Care and Site Closure Plan ("PISC") for the Hackberry Carbon Sequestration Well No. 001 was prepared to meet the requirements of SWO 29-N-6, §633 [40 CFR §146.93]. The plan describes various activities that will occur once injection has ceased and during the site closure once it is demonstrated that no additional monitoring is needed to ensure that this project does not pose a further endangerment to the USDW.

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# **Post-Injection Pressure Differentials**

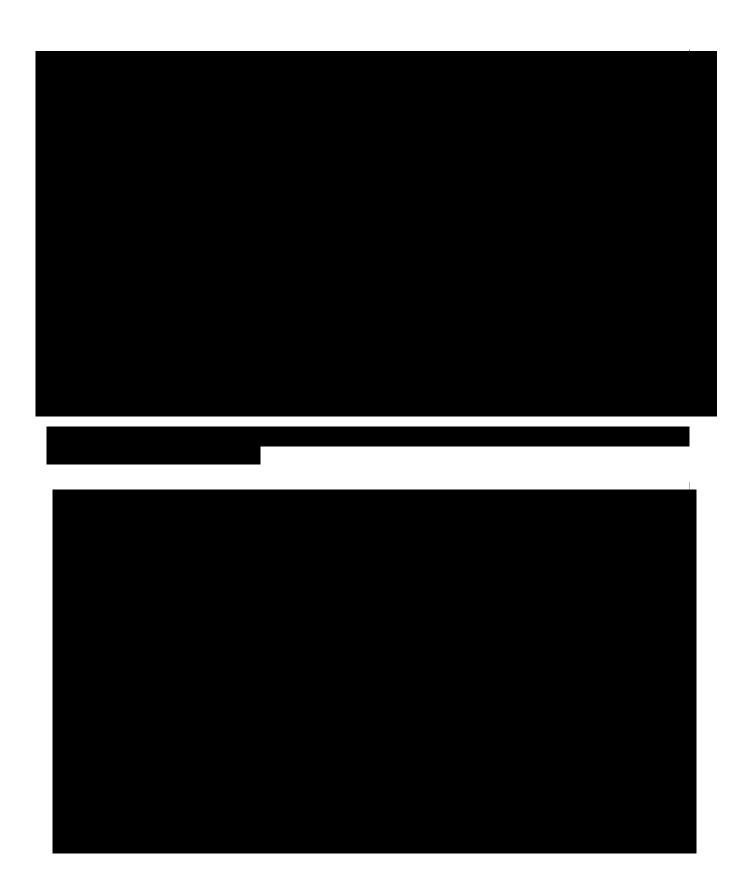
To meet the requirements of SWO 29-N-6 §633.A.1.b [40 CFR §146.93(a)(2)], the following table shows the expected pressure differential between pre-injection and post-injection pressures in the injection zone, as determined by the plume model described in Section 2.













# **Post-Injection Monitoring Plan**

As required by SWO 29-N-6 **§633.A.2** [40 CFR **§146.93(b)**], HCS will continue to monitor the site until the project no longer poses an endangerment to USDWs.

# **Post-Injection Monitoring Activities**

During the monitoring period, the testing and monitoring activities as described in Section 5 will be performed and reported at the frequency shown in Table 2.

Testing/Monitoring Activity	Frequency	Reporting Schedule
Groundwater Monitoring Well Geochemical Analysis	Every five years	Within 30 days after data collection and analysis
Injection Well Pressure and Temperature monitoring	Continuously	Annually
Direct Plume and Pressure Front Monitoring (VSP)	Annually	Within 30 days after data collection and analysis
Indirect Plume Calculations based on Pressure and Temperature data	Annually	Annually

Table 7- 2: Post-Injection Monitoring and Reporting Frequency

All testing and monitoring activities listed will be performed and analyzed as discussed in Section 5, including QA/QC measures.

### **Demonstration of Non-Endangerment of USDW**

Prior to the approval of the site closure authorization, HCS will provide documentation that the USDW will not risk further endangerment from the CO2 plume, as required by SWO 29-N-6 §633.A.3 [40 CFR §146.93(c)]. HCS will submit a report to the UIC Director demonstrating the non-endangerment of the USDW including site-specific conditions, updated plume model, predicted pressure decline within the injection zone and any updates to the underlying geological assumptions used in the original model.

### **Site Closure Plan**

To meet the requirements of SWO 29-N-6 **§633.A.3** [40 CFR **§146.93(e)**], the following site closure activities will be performed. These activities include removal of surface equipment, plugging of all wells, site restoration and submittal of final site closure reports.

#### **Pre-Closure**

Notice of intent to close the site will be submitted to the UIC Director at least 120 days prior to closure operations. If any changes have been made to the original Post-Injection Site Care and Site Closure Plan, a revised plan must also be submitted. Relevant notifications and applications, such as plugging requests, must be submitted and approved by the appropriate agency prior to commencing such activities.

#### **Plugging Activities**

The Hackberry Carbon Sequestration Well No. 001 and the ground water monitoring well, HCS Monitor Well No. 001, will be plugged as discussed in Section 6. The Plug and Abandonment procedures are

designed to prevent migration of CO2 or formation fluids in the injection interval from migrating to the USDW. Prior to plugging the wells, the mechanical integrity of these wells will be determined by an Annulus Pressure Test, casing inspection log, temperature log as well as a pressure fall-off test as described in Section 5. Plugging schematics and procedures are provided in Appendix J.

#### **Site Restoration**

Once the injection well and monitoring well are plugged and capped below grade, all surface equipment will be decommissioned and removed from the site.

#### **Documentation of Site Closure**

Within ninety (90) days of site closure, a final report must be submitted to the UIC Director, per requirements SWO 29-N-6 **§633.A.6** [40 CFR **§146.93(f)**], and will include the following:

- Documentation of appropriate injection and monitoring well plugging, including copy of the survey plats
- Documentation of well-plugging report to LADNR
- Records of the nature, composition and volume of the CO2 stream over the injection period

A record of notation in the facility property deed will be added to provide, in perpetuity, any potential purchaser of the property the following information:

- The fact the land was used to sequester carbon dioxide
- The name of the State agency (LADNR) with which the survey plat was filed and the EPA and or State Agency to which it was submitted
- The total volume of fluid injected, the injection zones into which it was injected and the period over which injection occurred

HCS will retain all records collected during the post-injection site care period for 10 years following site closure. At the end of the retention period, HCS will deliver all records to the UIC Director, which will thereafter be retained at a location designation by the Director for that purpose.